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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY, DOCKET NO.	CONFIRMATION NO.
10/697,527	10/30/2003	Marion Roder	101195-84	1174
27387	7590	05/24/2007	EXAMINER	
NORRIS, McLAUGHLIN & MARCUS, P.A.			SWITZER, JULIET CAROLINE	
875 THIRD AVE			ART UNIT	PAPER NUMBER
18TH FLOOR			1634	
NEW YORK, NY 10022				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/697,527	RODER ET AL.
	Examiner	Art Unit
	Juliet C. Switzer	1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 05 March 2007.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 11-13 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 11-13 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. 08/983,605.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. The previously set forth species election is WITHDRAWN. The claims are free of the prior art. The closest prior art, for example, Roder et al. (Molecular Gen Genet (1995) 246:327-333) and Devos et al. (Theor Appl. Genet (1995) 90:247-252) disclose methods for genotyping plants of the species *Triticum aestivum* and *Triticeae* at a microsatellite locus, but do not teach the use of any of primer pairs SEQ ID NO: 1 and 2, SEQ ID NO: 3 and 4, SEQ ID NO: 5 and 6, SEQ ID NO: 7 and 8, SEQ ID NO: 9 and 10, SEQ ID NO: 11 and 12, SEQ ID NO: 13 and 14, SEQ ID NO: 15 and 16, SEQ ID NO: 17 and 18 or SEQ ID NO: 19 and 20, as required by instant claim 11. Likewise, all methods which require the use of one of these primer pairs but include additional combinations are hereby rejoined to the method of claim 11.

### *Double Patenting*

2. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 11 and 12 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1 and 2 of prior U.S. Patent No. 6,720,137. This is a double patenting rejection.

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection

is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 11-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 of U.S. Patent No. 6,720,737. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 2 and 3 of the issued patent anticipate instant claim 11. Also, instant claim 12 is obvious in view of the combined disclosure of claims 2 and 3 of the copending application. That is, claim 13 of the copending application teaches all of the limitations of instant claim 12 except that a step of using the resulting genotype for a further step as recited in instant claim 12. However, this limitation is provided in claim 2 of the issued patent. At the time the invention was made, it would have been *prima facie* obvious to one of ordinary skill in the art to have modified claim 3 of the issued patent to include a step as disclosed in claim 2 of the issued patent. One would have been so motivated in order to have provided a method which applied the results obtained through the practice of claim 2 of the instant invention.

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6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 11, 12, and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 is indefinite because it is internally inconsistent, and therefore confusing. Part (a) of claim 11 requires that the “one or more oligonucleotide primer pairs” used in the method hybridize to a region of chromosomal DNA that “comprises a repeated dinucleotide motif comprising at least one of the following selected from the group consisting of (GA:CT) $n$ , (GA:CA) $n$ , and (AT:TA) $n$ , wherein  $n \geq 10$ .” Part (b) sets forth that each of the “one or more oligonucleotide primer pairs” consist of particular first and second oligonucleotides so that the primer pairs are selected from the pairs SEQ ID NO: 1 and 2, SEQ ID NO: 3 and 4, SEQ ID NO: 5 and 6, SEQ ID NO: 7 and 8, SEQ ID NO: 9 and 10, SEQ ID NO: 11 and 12, SEQ ID NO: 13 and 14, SEQ ID NO: 15 and 16, SEQ ID NO: 17 and 18 or SEQ ID NO: 19 and 20. Not all of these primer pairs amplify regions that meet the limitations of part (a) of the claims. For example, SEQ ID NO: 5 and 6 amplify a region that contains an AAAAAimp repeat. This nomenclature used on page 4 of the specification represents an imperfect repeat motif which is primarily AAAAA repeated but includes individual bases which are mutated (see specification p. 2). Thus, though the language of the claim allows for the use of SEQ ID NO: 5 and 6 as the selected “one or more primer pairs”, the fact of the matter is that it appears these sequence would not amplify a repeat region as required by part (a) of the claim. Therefore, the claim is internally inconsistent and confusing. If claim 11 were amended to recite “wherein said region of the

DNA comprises a repeated motif" and delete the language "comprises a repeated dinucleotide motif comprising at least one of the following selected from the group consisting of (GA:CT) $n$ , (GA:CA) $n$ , and (AT:TA) $n$ , wherein  $n \geq 10$ " this rejection would be overcome. Claims 12 and 13 are indefinite over this same recitation because they depend from claim 11 and are therefore also internally inconsistent.

Claim 13 is further indefinite because the claim recites that the method of claim 11 must further comprise one or more primer pairs from those listed, however it is not clear what it means for a method to comprise a primer pair. It is not clear how the claim language of claim 13 is meant to modify or alter the practice of the method of claim 11. Amendment of the claim to recite, for example, "The method of claim 11, further comprising amplifying the chromosomal DNA with one or more primer pairs..." would make it clear that the additionally recited primer pairs are meant to be used in an amplification step within the claimed method.

***Conclusion***

8. No claim is allowed.
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliet C Switzer whose telephone number is (571) 272-0753. The examiner can normally be reached on Monday, Tuesday, or Thursday, from 9:00 AM until 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached by calling (571) 272-0735.

The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300. Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the receptionist whose telephone number is (571)272-0507.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.



Juliet C. Switzer  
Primary Examiner  
Art Unit 1634

May 21, 2007



Christopher L. Switzer  
Director (Acting) TC1600